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FROM:

David Newman

MESSAGE:

Attache pursuant to your request please find copies of claims 1-49 submitted with the Reissue Application serial no. 09/023,780.

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- manufacturing a package for a memory card, the method comprising the [following] steps of:
- A. [Stamping] <u>stamping</u> metal covers to a size marginally larger than a mold in an injection molding process;
- B. [Bending] <u>bending</u> edges of said covers to conform to an intended shape of a frame element, the edges including fingers extending from the cover sides;
- C. [Inserting] inserting the covers into a mold in an injection molding process where they are slightly sprung and thus secure themselves in position;
- D. [Shooting] shooting plastic frame elements into the mold so that fingers included on the covers become embedded in the frames;
- E. [Removing] <u>removing</u> said covers from said mold;
- F. [Positioning] positioning a PCB between two covers, the PCB being held in the proper location by means of ejector pins on the plastic frames, the ejector pins being formed as a part of the molding process; and
- G. [Bonding] bonding the plastic frame elements together so that a package is formed.
- 2. The [process as claimed in claim] method of Claim | wherein[:] the bonding process [(G)] is sonic welding.
- The [process as claimed in claim] method

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- of Claim 1 wherein[:] ebonding process [(G)] is resistance welding.
- 4. The [process as claimed in claim] method of Claim 1 wherein [:] the bonding process [(G)] utilizes adhesives.
- The [process as claimed in claim] method of Claim 1 wherein [:] interior surfaces of the covers are coated with a o f layer thin material nonconductive before the PCB is positioned between the two covers.
- 6. A method of manufacturing a package for a memory card, the method comprising the steps of:
- A. stamping metal covers:
- B. bending edges of said covers to conform to an intended shape of a frame element, the edges including fingers extending from the cover sides:
- C. inserting the covers
 into a mold;
- D. shooting plastic into the mold to form the frame element around the fingers:
- E. removing said covers from said mold;
- F. positioning a PCB between two covers; and
- G. bonding the plastic frame elements together so that a package is formed.
- 7. The method of Claim 6 wherein the bonding process is sonic welding.
- 8. The method of Claim 6 wherein the bonding process is resistance welding.

- 9. The method of Claube 6 wherein the bonding process utilizes adhesives.
- 10. The method of Claim 6 wherein interior surfaces of the covers are coated with a thin layer of nonconductive material before the PCB is positioned between the two covers.
- 11. A method of manufacturing a package for a memory card, the method comprising the steps of:
- A. stamping metal covers to a size larger than a mold in an injection molding process:
- B. bending edges of said covers to conform to an intended shape of a frame element, at least one of the edges including fingers:
- C. inserting the covers into a mold in an injection molding process where they are slightly sprung and thus secure themselves in position;
- D. shooting plastic into the mold to form the frame element around the edges:
- E. removing said covers from said mold;
- F. positioning a PCB between two covers; and
- G. bonding the plastic frame elements together so that a package is formed.
- 12. The method of Claim
 11 wherein the bonding
 process is sonic welding.
- 13. The method of Claim
 11 wherein the bonding
 process is resistance
 welding.
- 14. The method of Claim
 11 wherein the bonding

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process utilizes and hesives.

15 The method of Claim
11 wherein interior
surfaces of the covers are
coated with a thin layer
of nonconductive material
before the PCB is
positioned between the two
covers.

16. A peripheral device PCB package comprising: two stamped metal covers with a plastic frame element corresponding to each cover, each cover having a first side and a second gide with a finger extending from one of said sides of each of the covers and wherein edges of the metal covers are bent to conform to the shape of the corresponding frame element and said finger is secured to the plastic frame element forming an integral unit wherein each of the plastic frame elements is injection molded around the finger; and

wherein the plastic frame element extends beyond a plane of the metal cover so that a plastic perimeter surface is exposed, thereby facilitating bonding of the two covers.

- 17. The package as claimed in Claim 16 wherein a plurality of fingers extend from one of said sides.
- 18. The package as claimed in Claim 16 wherein a plurality of fingers extend from at least two sides.
- 19. The package as claimed in Claim 16 wherein the fingers are embedded in the plastic frame elements.
- 20. A peripheral device

PCB package comprising

two stamped metal covers having a first side and a second side with a finger extending from one of said sides of each cover: and

a plastic frame element associated with each of the covers wherein the plastic frame elements are injection molded to secure the finger of each cover to the plastic frame element.

21. The package claimed in Claim further comprising:

a plastic perimeter surface extending beyond the plane of the metal facilitate cover to bonding of the two covers.

- 22. The package claimed in Claim wherein each of plastic perimeter surfaces is integrally formed with the plastic frame elements.
- 23. The package in Claim 20 claimed_ the plastic wherein perimeter surface is an energy director.
- 24. The package claimed in Claim 20 wherein a finger extends from one of said sides.
- <u> 25. The </u> package claimed in Claim 20 wherein a plurality of fingers extend from at least two <u>sidea.</u>
- <u> 26. The</u> package claimed in Claim 20 wherein the edge of the metal cover is bent to conform to the shape of the plastic frame element.
- 27. A PCB package com-<u>prising:</u>
- a first package half including a stamped metal cover having an edge formed in a U-shape and a

frame element injection molded within the U-shaped edge of the metal cover:

a second package half including a stamped metal cover and a molded frame element attached to the metal cover; and the first package half sonically bonded to

the second package half.

claimed in Claim 27 wherein the first package half
includes a plane bisecting
the U-shaped edge at its
terminal portion on a
first side and a second
side of the first package
half and a plastic perimeter surface exposed and
extending beyond the plane
of the first package half
to facilitate bonding with
the second package half.

29. The package as claimed in Claim 27 where in the plastic perimeter surface is an energy director.

claimed in Claim 27 wherein the second package half
includes a plane bisecting
the U-shaped edge at its
terminal portion on a
first and a second side of
the second package half
and a plastic perimeter
surface exposed and recessed below the plane of
the second package half to
facilitate bonding with
the first package half.

31. The package as claimed in Claim 27 wherein the edge is secured to the frame element and the frame element is injection molded partially around the edge.

32. The package as claimed in Claim 27 wherein a finger extends at an angle from the edge of the metal cover and the finger having the frame element partially injection molded

around the finger.



33. A peripheral device PCB package comprising:

two stamped metal covers with a plastic frame element corresponding to each cover. each cover having a first side and a second side with a finger extending from one of said sides of each of the covers and wherein edges of the metal covers are bent to conform to the shape of the corresponding frame element and gaid finger is secured to the plastic frame element forming an integral unit wherein each of the plastic frame elements is injection molded around the finger; and

wherein the plastic frame element extends beyond a plane of the metal cover so that a plastic perimeter surface is exposed, thereby facilitating bonding of the two covers.

- 34. The package as claimed in Claim 33 wherein a plurality of fingers extend from one of said sides.
- 35. The package as claimed in Claim 33 wherein a plurality of fingers extend from at least two sides.
- 36. The package as claimed in Claim 33 wherein the fingers are embedded in the plastic frame elements.
- 37. A peripheral device PCB package comprising:

two stamped metal covers having a first side and a second side with a finger extending from one of said sides of each cover; and

a plastic frame element associated with each of the covers wherein the plastic frame elements are injection molded to secure the finger of each cover to the plastic frame element.

38. The package as claimed in Claim 37 further comprising:

a plastic perimeter surface extending beyond the plane of the metal cover to facilitate bonding of the two covers.

39. The package as claimed in Claim 38 where in the plastic perimeter surfaces is integrally formed with the plastic frame elements.

40. The package as claimed in Claim 38 where in the plastic perimeter surface is an energy director.

41. The package as claimed in Claim 37 where in a finger extends from one of said sides.

d2. The package as claimed in Claim 37 where in a plurality of fingers extend from at least two sides.

claimed in Claim 37 where in the edge of the metal cover is bent to conform to the shape of the plastic frame element.

44. A PCB package com-

a first package half including a stamped metal cover having an edge formed in a U-shape and a frame element injection molded within the U-shaped edge of the metal cover;

a second package half including a stamped metal cover and a molded frame element attached to the metal cover; and

the first package half sonically bonded to the second package half.

package <u>45. The </u> claimed in Claim 44 wherein the first package half includes a plane bisecting the U-shaped edge at its terminal portion on a first side and a second side of the first package half and a plastic perimeter surface exposed and extending beyond the plane of the first package half to facilitate bonding with the second package half.

46. The package as claimed in Claim 45 where-in the plastic perimeter surface is an energy director.

47. The package as claimed in Claim 44 wherein the second package half includes a plane bisecting the U-shaped edge at its terminal portion on a first and a second side of the second package half and a plastic perimeter surface is exposed and recessed below the plane of the second package half to facilitate bonding with the first package half.

48. The package as claimed in Claim 44 wherein the edge is secured to the frame element and the frame element is injection molded partially around the edge.

49. The package as claimed in Claim 44 wherein a finger extends at an angle from the edge of the metal cover and the finger having the frame element partially injection molded around the finger.